

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/651,096 08/29/2003		Masamichi Imamura	023484-0152	7722	
22428	7590 05/09/2005		EXAMINER		
FOLEY AND LARDNER SUITE 500			SICONOLFI, ROBERT		
3000 K STRE	ET NW	ART UNIT	PAPER NUMBER		
WASHINGTO	ON, DC 20007	3683			

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	on No.	Applicant(s)				
Office Action Summary		10/651,09	6	IMAMURA, MASAMICHI				
		Examiner		Art Unit				
		Robert A.		3683				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status			•					
1)	Responsive to communication(s) filed on		•					
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ Th	· · · · · · · · · · · · · · · · · · ·						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)🖂	4)⊠ Claim(s) <u>1-26</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)□	Claim(s) 21 and 22 is/are allowed.							
6)⊠	☑ Claim(s) <u>1-20 and 23-26</u> is/are rejected.							
· · · · · · · · · · · · · · · · · · ·	Claim(s) is/are objected to.							
8)[	Claim(s) are subject to restriction and	l/or election re	equirement.		•			
Application Papers								
9) The specification is objected to by the Examiner.								
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
Attachment	t(s)							
	e of References Cited (PTO-892)	•	4) Interview Summary (					
3) 🔯 Inform	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/0 r No(s)/Mail Date 20050113.	98)	Paper No(s)/Mail Dat 5) Notice of Informal Pa 6) Other:		0-152)			

Application/Control Number: 10/651,096 Page 2

Art Unit: 3683

### **DETAILED ACTION**

1. Amendment filed on 1/28/05 has been received.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-14, 25, and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1 and 14 state that a "road wheel status" is used. The instant application has only shown support for the use of road wheel acceleration for this purpose. Claim 3 has been amended to claim that the road wheel velocity is multiplied by coefficient KVW. This directly contradicts the specification (e.g. figure 7 box S410) in which the acceleration is used in such a calculation. The applicants amendments are not supported by specification.

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Application/Control Number: 10/651,096

Art Unit: 3683

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki (JP 08104219A) in view of Onogi et al (U. S. Patent no. 4,749,239)

Okazaki discloses calculating the master cylinder pressure by first calculating the vehicle body deceleration (vehicle model which is equivalent to the claim limitation "second wheel cylinder brake liquid pressure estimating section"), and then corrects by calculating the pressure change from the increasing time and the decreasing time (hydraulic model which is equivalent to the claim limitation "first wheel cylinder brake liquid pressure estimating section").

Okazaki does not disclose using the road wheel status (interpreted by the examiner as road wheel acceleration) as the basis of the vehicle model. Onogi et al teaches the use of road wheel acceleration as the basis of a vehicle model (see column 3 lines 30-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use road wheel status as taught by Onogi et al in the system of Okazaki as it eliminates the need to have either a vehicle acceleration sensor or performing a complex calculation that involves each wheel acceleration and said wheel's slip in order to determine the vehicle body acceleration. It thus reduces costs and complexities of the system.

Regarding claims 15 and 16, Okazaki et al does not disclose using the method on a traction control system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method on a traction control system since none of the measurement are based on the stroke or force of the brake pedal and

Art Unit: 3683

determining the master cylinder pressure to calculate brake control is just as important to traction control as ABS.

Regarding claim 20, Okazaki discloses treating the rear wheels independently in paragraph 61.

6. Claims 21 and 22 are allowed.

### Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3683

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Siconolfi whose telephone number is 571-272-7124. The examiner can normally be reached on M-F 10 am-3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (571) 272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert A. Sicoffolff Primary Examiner

Art Unit 3683